STANDARDS DEVELOPMENT BRANCH OMOE
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PESTS
AND
PESTICIDES

SB
931
.O57
1977

Ministry
of the
Environment

Ontario

The Honourable
George R. McCague,
Minister

K.H. Sharpe,
Deputy Minister

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PESTS
AND
PESTICIDES

MINISTRY OF THE ENVIRONMENT
MAY, 1977

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CHEMICALS

1. Classification by use

   Insecticide

   Rodenticide

2. Classification by formulation

   Wettable powder

   Dust

   E. C.

   S.

   Aerosols

   Granules, Pellets, Baits

3. Classification by Chemical Composition

   Inorganic

   Organic

      CHl

      OPl

      Carbamate

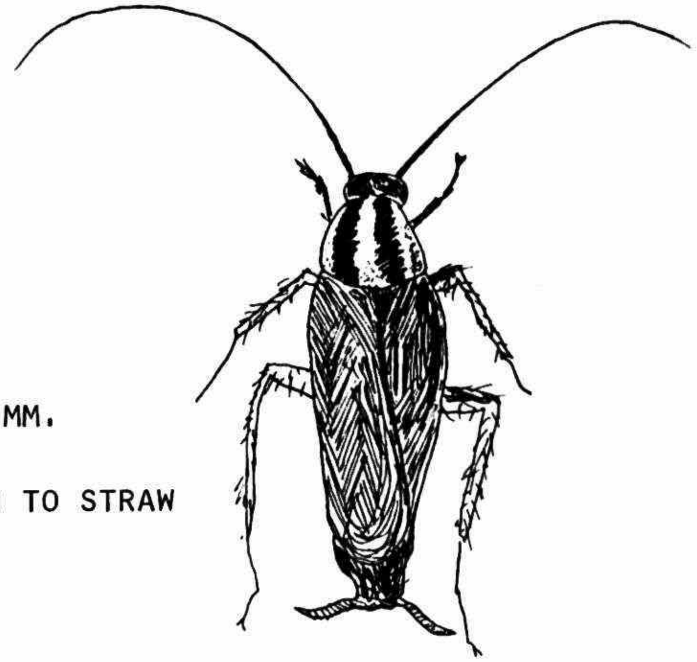
      Botanical

      Rodenticide

COCKROACHES

German Roach

(Blatella germanica)



Identification

Size - Small 10 - 15 mm.

Color - Yellowish-brown to straw color.

Markings (pronotum)

- Two distinct parallel dark bands running the length of the pronotum.
- In nymphal stages bands extend through meso and metanotum.

Wings - Both sexes fully developed.

Habits

- The german roach develops rapidly under unsanitary conditions.
- Prefers warm - moist environ. 70°F or 23 - 25°C.
- Therefore, pest in kitchen feeds on stored food scraps which may have fallen undetected.
- Nocturnal but may be seen occasionally during the day if disturbed from hiding spot, which is typically dark and unexposed, i.e. under stoves, refrigerators, baseboards, spaces around water pipes and electrical conduits.
- Found in most buildings centrally heated.

Life cycle

Egg

- Egg is laid in egg cases (ootheca) carried by female.
- Capsule rectangular in shape, glossy brown color, contains twenty to forty eggs.

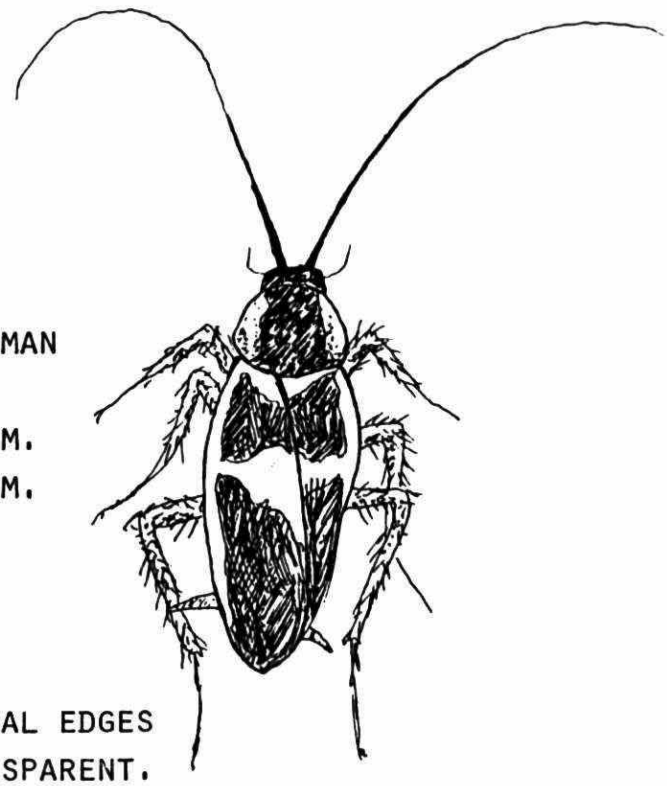
NYMPH	- WHEN YOUNG IS READY TO BE HATCHED, CAPSULE IS DROPPED AND YOUNG EMERGES, STRUGGLE FREE AND IMMEDIATELY MOULT. - NORMALLY SIX MOULTS.
ADULT	- PAIR OFF ABOUT A WEEK AFTER LAST MOULT, OVOPOSITION FOLLOWS FOUR TO SEVEN DAYS LATER. - FEMALE MATED ONCE CAN PRODUCE UP TO SEVEN CAPSULES WITHOUT FURTHER FERTILIZATION. - SUCCEEDING CAPSULES CAN BE FORMED ABOUT A WEEK AFTER PRECEDING ONE DEPOSITED. - NUMBER OF EGGS PER CAPSULE DECREASE AFTER DEPOSITION OF FOURTH. - CAN REACH FULL MATURITY WITHIN SIX WEEKS UNDER OPTIMUM CONDITION.

CONTROL

NOTES

BROWN-BANDED ROACH

(Supella supellectilium)



IDENTIFICATION

SIZE
- SMALLER THAN GERMAN ROACH.
- MALE 13 - 14.5 MM.
- FEMALE 10 - 12 MM.

COLOR
- YELLOWISH-BROWN.

MARKINGS (WINGS)

- OUTSIDE OR LATERAL EDGES OF PRONOTUM TRANSPARENT.
- NYMPH WITH TWO DISTINCT BROWN BANDS, ONE AT MOST POSTERIOR EDGE OF MESONOTUM, OTHER AT FIRST ABDOMINAL SEGMENT.
- ADULT SHOWS SIMILAR BANDS, ABSENCE OF PARALLEL LINES ON PRONOTUM DISTINGUISHES FROM GERMAN.

WINGS
- COMPLETELY COVER ABDOMEN OF MALE.
- RARELY TOUCH TIP OF ABDOMEN IN FEMALE.

HABITS

- NOCTURNAL, BUT MAY OFTEN BE SEEN DURING THE DAY.
- CAPABLE OF FLIGHT, MAY BE SEEN FLYING AROUND LIGHTS.
- FOUND THROUGHOUT INFESTED PREMISES. PREFER LOCATIONS HIGH UP IN HEATED ROOMS, WITH AVERAGE TEMPERATURE OF 26.5°C. (80°F)
- FOUND IN DESK AND BUREAU DRAWERS, BEHIND PICTURES, ON BOOK SHELVES (FEED ON GUM SIZING OF BOOKS), BEHIND WALLPAPER, BENEATH TABLES AND OTHER FURNITURE.
- HAS PREFERENCE FOR HIDING IN FURNITURE, BEDDING, CUPBOARDS, BEHIND PICTURE MOULDINGS. SELDOM VISITS KITCHEN.
- ACTIVE - HAS TENDENCY TO FLY WHEN DISTURBED.

LIFE CYCLE

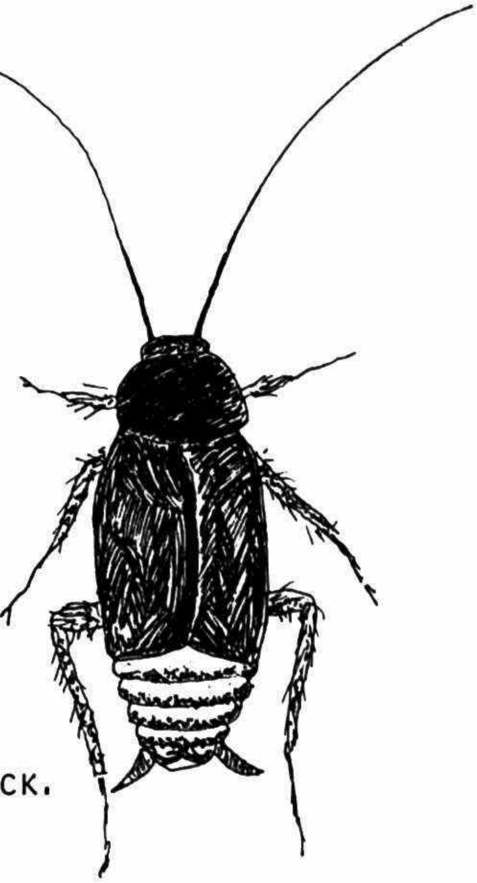
- OOTHECA SMALL, REDDISH-BROWN, PURSE SHAPED.
- CAPSULE WITH NINE VERTICAL FURROWS ON EACH SIDE, CORRESPONDING TO POSITION OF EACH EGG.
- AVERAGE 14 TO 17 EGGS PER CAPSULE, THIS NUMBER REMAINS RELATIVELY CONSTANT WITH SUCCEEDING CAPSULES.
- INCUBATION TIME - 37 TO 74 DAYS DEPENDING ON THE TEMPERATURE.
- FIRST OOTHECA ABOUT TEN DAYS AFTER LAST MOULT.
- CARRIED ABOUT 18 HOURS - DEPOSITED NEAR FOOD SOURCE.
- NOT UNCOMMON TO FIND LARGE PILE OF DEPOSITED CAPSULES IN ONE SPOT.

CONTROL

NOTES

ORIENTAL ROACH

(Blatta orientalis)



IDENTIFICATION

SIZE - LARGE 20 - 24 MM. SEXES SIMILAR IN SIZE.

WINGS - IN THE MALE WING ALMOST REACHES TIP OF ABDOMEN. WINGS IN THE FEMALE ARE SHORT AND OFTEN ABSENT.

COLOR - DARK REDDISH-BROWN TO BLACK.

HABITAT

- PREFERS TEMPERATURE OF 20 - 29°C.
- USUALLY FOUND IN AREAS COOLER THAN GERMAN ROACH.
- BASEMENTS, SERVICE CONDUITS AND CRAWL SPACES.
- IN KITCHENS, BEHIND RADIATORS, OVENS, HOT WATER PIPES. OFTEN FOUND BEHIND BATHS AND SINKS CONGREGATING AROUND SOURCES OF WATER.
- CAN BE FOUND ON UPPER LEVELS IN HIGH RISE BUILDINGS.
- OFTEN FOUND OUTDOORS DURING SUMMER, IN GARBAGE DUMPS OR BACK LANES WITH LARGE ACCUMULATION OF REFUSE.

LIFE CYCLE

EGG

- OOTHECA LARGE (10 x 5 MM.)
- DARK REDDISH-BROWN. SOFT WHEN DEPOSITED, DEEPENING IN COLOR, BECOMING HARD AND BRITTLE.
- NEWLY EMERGED NYMPH UNDERGOES MOULT WITHIN MINUTES.
- DEVELOPMENT MAY BE CURTAILED DURING WINTER AT NYMPH OR OOTHECA STAGE.

NYMPH - UNDERGOES SEVEN MOULTS TO MATURITY.
- FIRST OOTHECA PRODUCED ABOUT TWELVE DAYS AFTER LAST MOULT.

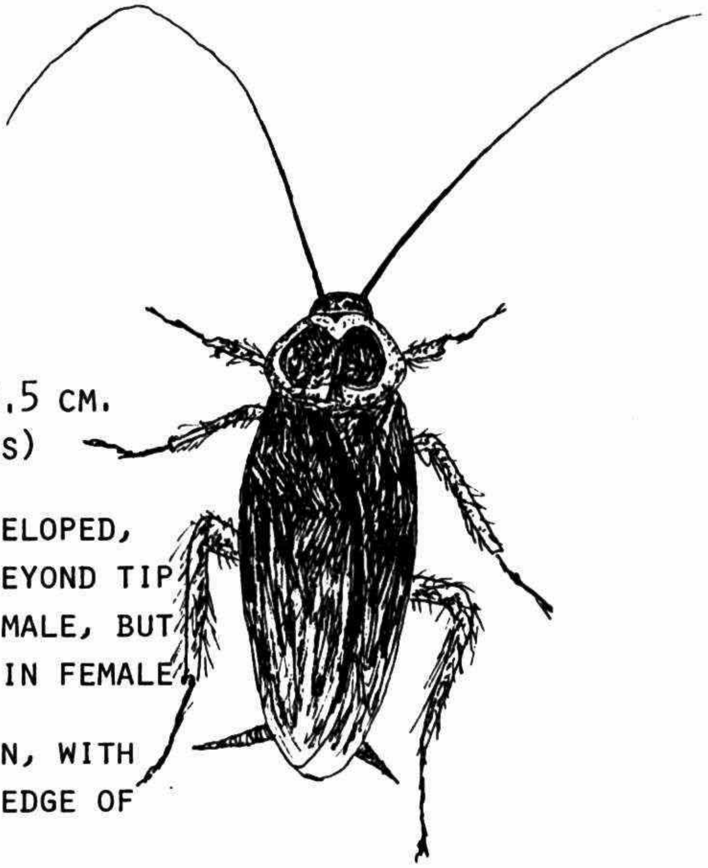
ADULT - FEMALE CAPABLE OF PRODUCING FIVE TO TEN OOTHECAE.

CONTROL

NOTES

AMERICAN ROACH

(Periplaneta americana)



IDENTIFICATION

SIZE - LARGE 3.0 TO 4.5 CM. (1 - 1.5 INCHES)

WINGS - WHEN FULLY DEVELOPED, EXTENDS WELL BEYOND TIP OF ABDOMEN IN MALE, BUT JUST OVERLAPS IN FEMALE.

COLOR - SHINY RED-BROWN, WITH YELLOW AROUND EDGE OF PRONOTUM.

HABITS

- CAN FLY, BUT RARELY DO, SHORT DISTANCES ONLY.
- PREFERS WARM MOIST ENVIRON.
- FREQUENTLY FOUND IN RESTAURANTS, BAKERIES, GROCERY STORES, MOST PREMISES WHERE FOOD IS PREPARED OR STORED.
- MAY ALSO BE FOUND IN BASEMENTS, BATH ROOMS AND SEWERS.
- DURING SUMMER CAN BE FOUND OUTDOORS IN GARBAGE, ETC.

LIFE CYCLE

EGG
- CAPSULE CONTAINS AVERAGE OF SIXTEEN EGGS.
- INCUBATION TIME 24 - 59 DAYS.

NYMPH
- SEVEN TO TEN MOULTS TO MATURITY.
- FIRST FIVE MOULTS MALE AND FEMALE UNIFORM PALE BROWN. IN SIXTH, DEVELOP PALE PATCHES IN PRONOTUM.

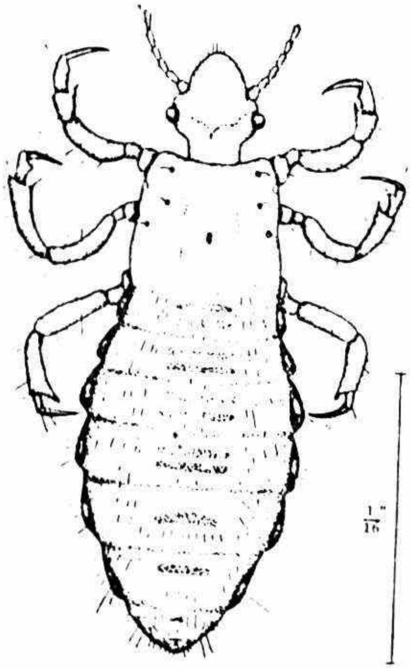
ADULT

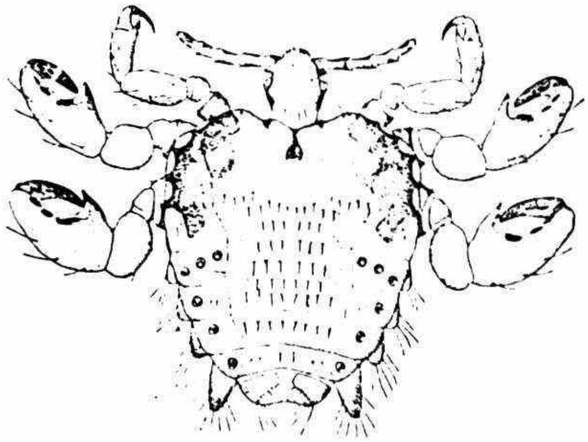
- FEMALE HAS VENTRAL KEEL WITH SLIT RUNNING ALONG IT.
- BOTH WITH PAIR OF WELL DEVELOPED CERCI.
- FEMALE CAN PRODUCE TEN TO FIFTEEN EGG CAPSULES IN TEN MONTHS.
- CARRIED SIX TO TWENTY-FOUR HOURS BEFORE DEPOSITION.
- UNDER IDEAL CONDITIONS LIFE EXPECTANCY (EGG TO GRAVE) ABOUT TWO YEARS.
- (HAVE BEEN REPORTED TO LIVE UP TO FOUR YEARS).

NOTES

HEAD AND BODY LICE (*Pediculus humanus*) (*Pediculus humanis*)

PUBIC OR CRAB LICE (*Pthirus pubis*)





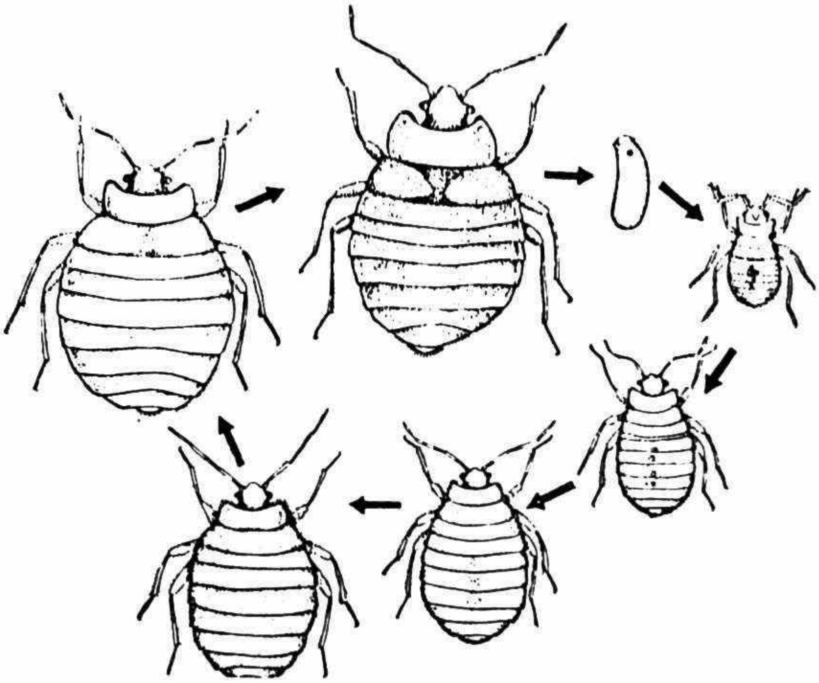
		HEAD AND BODY LICE	PUBIC OR CRAB LICE
SIZE		2.5 - 3.5 MM. 2.75 - 3.85 MM.	1.5 - 2.0 MM.
APPEARANCE		- VARIES FROM DIRTY WHITE TO GREYISH. - DEGREE OF ADULT COLORATION DEPENDS ON HOST'S COLORATION.	STRONG THICK CLAWS, MID AND HIND LEGS. BODY BROADER THAN LONG.
LIFE CYCLE	EGG	LAID AT BASE OF SCALP CEMENTED TO HAIR. PEARLY - WHITE 0.8 x 0.3 MM.	SMALLER THAN HEAD LOUSE. MORE GLUE USED. INCUBATION 7 - 8 DAYS.
	NYMPH	THREE STAGES FIRST STRAW COLOR. RED WITH FIRST MEAL. THEREAFTER PURPLE - BLACK. INCUBATION 8 - 9 DAYS. NYMPH 8 - 9 DAYS. COMPLETE CYCLE EVERY 18 DAYS.	THREE NYMPHAL STAGES. DO NOT LEAVE HAIR. REMAIN ATTACHED BY TORSAL CLAWS. NYMPH TO ADULT 13 TO 17 DAYS. UNABLE TO SURVIVE LONGER THAN 24 HOURS AWAY FROM HOST. TRANSMISSION OCCURS MOSTLY THROUGH SEXUAL CONTACT ALTHOUGH MAY NOT BE ONLY MEANS OF DISPERSAL.

CONTROL

NOTES

BEDBUG

(*Cimex lectularius*)



IDENTIFICATION

SIZE 1/4" TO 3/8"

- ROUND AND FLAT.
- REDDISH BROWN "MAHOGANY COLOR".
- ALMOST WINGLESS
- COMPOUND EYES

LIFE HISTORY

- EGGS LAID IN CRACKS AND CREVICES NEAR HOST; COVERED WITH GLUE SUBSTANCE.

NYMPH

- SIMILAR TO ADULT BUT THIN CUTICLE ENABLES VISION OF STAGE OF BLOOD MEAL.
- EACH STAGE REQUIRES BLOOD MEAL.
- FIVE STAGES TO ADULT.

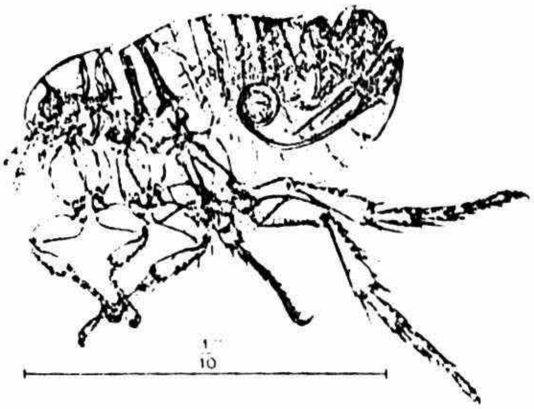
BITE - SMALL HARD SWELLING THAT IS WHITE RATHER THAN RED.

HABITS

- MEMBER OF ORDER HEMIPTERA I.E. TRUE BUG.
- HAS PIERCING - SUCKING MOUTHPARTS.
- WELL DEVELOPED LEGS, ABLE TO CRAWL UP CLEAN GLASS, WALLS, ETC.
- HIDE IN WOODWORK CREVICES, BEHIND PLASTER AND LOOSE WALLPAPER.
- NOCTURNAL
- USUALLY A DISTINCT ODOR PRESENT.

NOTES

FLEA



IDENTIFICATION

ADULT - WINGLESS, RED BROWN TO BROWN OR BLACK.

SIZE - 1/16 TO 1/8", FLATTENED FROM SIDES.

LIFE HISTORY

LIFE HISTORY - COMPLETE

FOOD - BLOOD FOR ADULTS. ORGANIC DEBRIS FOR LARVAE.

BITE - SMALL, HARD, RED, SLIGHTLY RAISED ITCHING SPOT.
- BLEEDING USUALLY OCCURS FROM SINGLE PUNCTURE.

HABITS

CONTROL

1. PETS

2. INDOORS

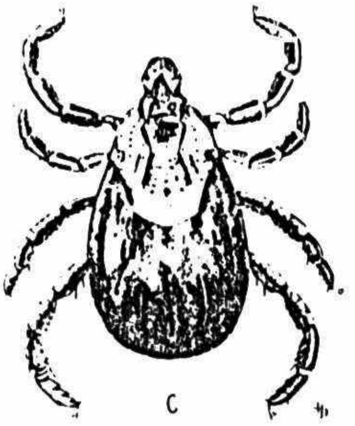
3. OUTDOORS

4. SPACE TREATMENT

CONTROL

NOTES

Tick



Summary - The American dog tick, which is considered an outdoor pest, attacks man, domestic and wild animals. It is an important vector of diseases such as Rocky Mountain spotted fever.

Brown dog ticks primarily attack dogs and are found in huge numbers indoors quite often. Identification is an important requirement for control.

	Brown dog tick *(Rhipicelphalus sanguineus)*	American dog tick *(Dermacentor variabilis)*
Size before eating	1/8"	1/4"
After eating	1/2"	1/2"
Color	Uniform red - brown no white on shield.	Dark brown with white on shield.
Habitat	Crack and crevice indoors.	Outdoors
Host	Dog	Animal, man, mice and rabbit.

BROWN DOG TICK

NOTES

CONTROL

INDOORS

OUTDOORS

AMERICAN DOG TICK

NOTES

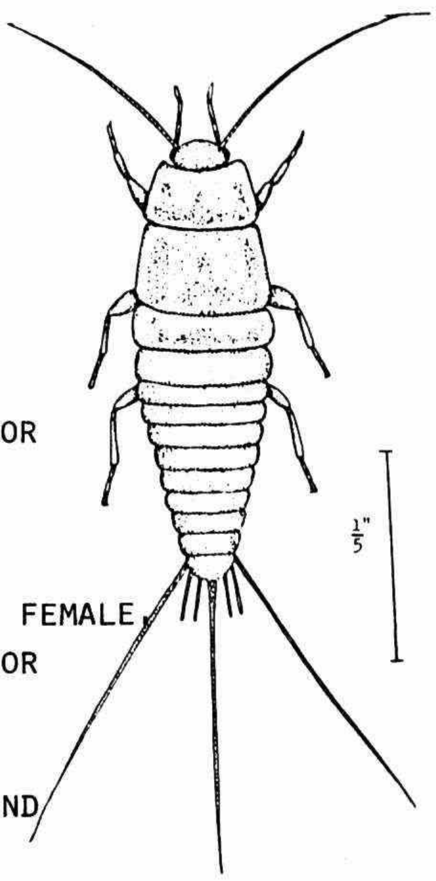
CONTROL

INDOORS

OUTDOORS

SILVERFISH FIREBRAT

(Lepisma saccharina) *(Thermobia domestica)*



IDENTIFICATION

- WINGS ABSENT.
- SHINING GREY COLOR.
- LONG ANTENNAE.
- TORPEDO SHAPED.
- THREE LONG BRISTLES POSTERIOR END OF ABDOMEN.

LIFE HISTORY

EGG

- ABOUT 100 EGGS LAID BY EACH FEMALE, SINGLY OR IN GROUPS OF TWO OR THREE IN CREVICES AND UNDER OBJECTS.
- OVAL 1.5 x 1.0 MM. WHITE AND SMOOTH, SOON TURNS BROWNISH AND WRINKLED.

NYMPH

- WHITISH UNTIL THIRD MOULT, THEN TAKES ON SCALES CHANGING TO A GREY COLOR.
- MOULTS THROUGHOUT LIFE EVEN AFTER REACHING MATURITY.
- CAN REGENERATE ORGANS, I.E. LEGS.

LENGTH OF LIFE CYCLE

- INCUBATION 19 DAYS AT 32°C, 43 AT 22°C

NYMPHAL STAGES - 90 TO 120 DAYS AT 27°C

ADULT

- 3 1/2 YEARS AT 27°C; 2 YEARS AT 27°C
- OPTIMUM RELATIVE HUMIDITY 90% FOR MATURATION.

HABITS

- NOCTURNAL, AVOIDS LIGHT, OFTEN FOUND IN DAMP AREAS SUCH AS KITCHENS AND BATHROOMS.
- FEEDS MAINLY ON CARBOHYDRATE SUBSTANCES, I.E. WALLPAPER PASTE, DAMP WALLPAPER.
- KNOWN TO BITE IRREGULAR SHAPED HOLES IN LINEN, COTTON AND ARTIFICIAL SILK.
- MAY ALSO FEED ON BODIES OF DEAD INSECTS.
- CAN OCCASIONALLY BE RESPONSIBLE FOR BREAKDOWN OF BOOK BINDINGS (I.E. FEED ON GLUE).

NOTES

FIREBRAT

(Thermobia domestica)

IDENTIFICATION

- SIMILAR TO SILVERFISH, BUT LONGER AND WIDER AND DOES NOT HAVE METALLIC APPEARANCE.
- GREYISH - WHITE WITH DARK SPECKLED MARKINGS.

LIFE HISTORY

EGG - SMALLER THAN SILVERFISH (1.0 x 0.8 MM.)

NYMPH - INDETERMINABLE NUMBER OF STAGES, POSSIBLY 60.
- ACQUIRES SCALES AT FOURTH STAGE.

LENGTH OF CYCLE

- INCUBATION - 77 DAYS AT 25°C.
- 9 DAYS AT 44°C.
- MATURATION - 330 DAYS AT 27°C.
- 47 DAYS AT 42°C.
- ADULT - 2 TO 2 1/2 YEARS AT 32°C, 1 TO 1 1/2 YEARS AT 37°C.

HABITS

- FOUND INDOORS IN WARM OR HOT LOCATION, I.E. BAKERIES, RESTAURANT KITCHENS OR FACTORIES WHERE STEAM IS USED.
- HIGH HUMIDITY NOT IMPORTANT.
- SIMILAR FOOD TO SILVERFISH, BUT MAY FEED ON CRUMBS OR OTHER WASTE FOOD.

CONTROL

NOTES

SCABIES

HUMAN ITCH MITE

(Sarcoptes scabiei hominis)

DESCRIPTION

- BROADLY OVAL, SOMEWHAT HEMISPHERICAL.
- VERY SMALL
- ADULT FEMALE - 0.33 TO 0.45 MM. LONG.
- ADULT MALE - 0.20 TO 0.24 MM. LONG.
- TRANSLUCENT, DIRTY-WHITE COLOR, WITH CHITINIZED PORTIONS BROWNISH IN COLOR.
- BODY SEEN TO BE DIVIDED INTO TWO SEGMENTS BY A FOLD IN THE INTEGUMENT. POSTERIOR PORTION BEARING LAST TWO PAIR OF LEGS, WHILE THE ANTERIOR PORTION HAS FRONTAL TWO PAIR.
- LACK EYES.
- BODY HAS SPINES, DIRECTED BACKWARD, RESULTS IN MAKING IT DIFFICULT TO PULL MITE FROM BURROW.

LIFE CYCLE

- BOTH SEXES AND ALL STAGES TEND TO BURROW INTO SKIN WHEN PLACED ON IT.
- FEMALE MAKES A LONGER BURROW, USUALLY IN FOLDS OF SKIN OR CRACKS.
- WINDING BURROW MAY REACH A LENGTH OF 5 TO 15 MM., MADE IN THE EPIDERMAL LAYER OF THE SKIN.
- FEMALE LAYS EGGS IN BURROW AND DIES SHORTLY AFTER.
- ADULT LIFE 2 - 6 WEEKS. FEMALE LAYS 40 - 50 EGGS.
- DURATION OF LIFE STAGES OF FEMALE.

  EGG - 2.5 TO 3.5 DAYS

  LARVA - 1.5 TO 3 DAYS

  1ST NYMPH - 1.5 TO 2.5 DAYS

  2ND NYMPH - 2 TO 4 DAYS

- TOTAL LIFE CYCLE 9 TO 15 DAYS.
- MALE HAS ONLY 1 NYMPHAL STAGE. FEMALE CAN BE FERTILIZED IN SECOND NYMPHAL STAGE.

Mode of Transmission	- Close contact with carrier, i.e. in bed. - Can also be transmitted through "Dancing, flirtation, and ordinary intimate contact between family members."
Body Regions Infested	- Female can become completely concealed under skin in as little as 2.5 minutes. - Activity slows down at lower temperatures. - Most susceptible region. - Interdigital spaces (between fingers), wrists, the penis, scrotum and buttocks, back of the knee, ankles and toes. - In women the underside of breasts often attacked.
Symptoms of Infestation	- In humans small numbers of mites can cause a disease knows as "scabies". - In severe cases, victim suffers from lack of sleep. - Allergic reactions may develop, with intense itching and redness. - Rash may develop.
Treatment	- Patient should contact doctor. - Use of Kwellada (gamma benzene hexachloride) salve can be recommended. - Available as cream, lotion or shampoo.

NOTES

FLIES

RESIDUAL CHEMICAL CONTROL

1% CYGON

3% MALATHION*

1% DIBROM

1% DIAZINON*

1% RONNEL

1.5% GARDONA

(* - ADD SUGAR AT 1/2 LB TO A GALLON OF SPRAY).
- APPLY TO ALL RESTING AREAS TO POINT OF RUNOFF.
- COMMENCE TREATMENT IN EARLY MAY BEFORE HEAVY BUILDUP.
- 1 GALLON WILL TREAT APPROXIMATELY 1,000 SQ. FT.

SPACE SPRAY

- 0.25% PYRETHRUM

SANITATION

- TO COMMENCE LATE APRIL, EARLY MAY.
- REMOVE MANURE, WET ROTTING HAY, LEAVES OR GRASS, SPILLED FEED AND GARBAGE ACCUMULATION.
- ASSURE ALL GUTTER DRAINS CLEAN.

HOUSEKEEPING

- REPAIR AND REPLACE SCREENS, DOORS, FANS, ETC.

CONTROL

NOTES

FABRIC PESTS

CLOTHES MOTH	CARPET BEETLE
TWO SPECIES	FOUR SPECIES
(WEBBING CLOTHES MOTH) (CASEMAKING CLOTHES MOTH)	(BLACK) (VARIED) (FURNITURE) (CARPET BEETLE)
- PRODUCTS WITH ANIMAL PROTEIN, EG. FURS, FEATHERS, HAIR, FELT, SILK OR WOOL.	- ARE ECONOMICALLY IMPORTANT FABRIC FEEDERS. - PRODUCTS WITH ANIMAL PROTEIN.
COMPLETE METAMORPHOSIS	COMPLETE METAMORPHOSIS

HABITS

CLOTHES MOTH	CARPET BEETLE
- PREFER DIM OR DARK AREAS. - POOR FLIER. - ADULT REMAINS CLOSE TO LARVAE AND DO NOT EAT.	- LARVAE ARE REPELLED BY LIGHT. - FEED WELL DOWN INTO PILE OF THICK RUGS. - ADULTS FEED ON POLLEN OF FLOWERS, ESPECIALLY SPIRALA. - EGGS LAID IN DUST, CRACKS, ETC.
- DAMAGE OF WEBBING CLOTHES MOTH SIMILAR TO CARPET BEETLE, BUT EVIDENCE OF WEBBING. - CASEMAKING CLOTHES MOTH LESS COMMON, LARVAE CARRIES "CASE" AT ALL TIMES.	

CONTROL

SAME CONTROL IS RECOMMENDED FOR BOTH PESTS.

1. SANITATION

2. VACUUM

3. APPLICATION OF PESTICIDE

   - FLOOR AREAS AND BASEBOARDS.
   - CRACKS AND CREVICES.
   - UNDER AND TOP OF CARPETS.

   2% MALATHION
   1/2% DIAZINON
   1% RONNEL
   .3% LINDANE

STORED PRODUCT PESTS

WHOLE KERNEL PESTS

- GRANARY WEEVIL
- RICE WEEVIL

MILLED PRODUCT PESTS

- SAW TOOTHED GRAIN BEETLE
- CONFUSED FLOUR BEETLE
- RED FLOUR BEETLE
- INDIAN MEAL MOTH
- MEDITERRANEAN FLOUR MOTH
- DRUGSTORE BEETLE
- CIGARETTE BEETLE
- KHAPRA BEETLE

OLD DECAYED OR ROTTEN PRODUCTS

- YELLOW MEALWORM
- LARDER BEETLE

LIFE CYCLE - COMPLETE FOR ALL OF THESE PESTS.

CONTROL

DIAZINON 1% RESIDUAL SPRAY

DURSBAN 0.5%

MALATHION 2%

LINDANE 1/2%

AND SPACE SPRAY,

- DDVP 1%
- PYRETHRUM 0.25%

NOTES

Norway Rat

(Rattus norvegicus)

Identification

Weight - About 200 - 500 grams.

Length - Tail about 110 mm, shorter than body.

Colour - A wide range of colours, from grizzled reddish to grayish brown.

Life cycle - Gestation - 21 to 23 days, and 3 to 6 litters over 1 year.
- Litters of 6 to 12.
- Nurses until 4 or 5 weeks old.
- Independent at 3 months.
- Lives up to 1 year.

Habitat

Male	Female
Lives under boards, in tall grass etc., at ground level.	Lives in burrow.

Habits, senses and signs

- Needs water
- Burrowers
- Continually urinate and gnaw.
- Excellent climber, swimmer and has keen hearing.
- Poor eyesight
- Eats early morning and early evening.
- Nocturnal

CONTROL

BAIT - MEAT, EGGS, GRAIN
- ANTICOAGULANT RODENTICIDES (E.G. ROZOL).
- ZINC PHOSPHATE OR RED SQUILL.
- FUMIGATE BURROWS.
- BUILD OUT.
- GOOD SANITATION.
- TRAPS, STICKY BOARDS AND TRACKING POWDER.

NOTES

House Mouse

(Mus musculus)

Identification

Weight - 15 grams.

Body Length - 85 mm

Colour - Has a brownish gray body and dark tail.

Droppings - Rod or spindle-shaped, measuring about 6 mm.

Life cycle

- Reaches maturity at about six weeks, and has a life span of about one year.
- Female may bear as many as 3 litters of 5 or 6 young, depending on food and shelter.

Habitat

- During summer lives outdoors, close to buildings, sidewalks, or in underbrush.
- Prefers to live indoors, anywhere between basement to attic.

Habits

- Eats any food available, but prefers cereal grains and seeds.
- Requires little water, and eats about 3 grams of dry food each day.
- Travels in a 6 metre radius when searching for food.

Signs

- Gnawing
- Droppings
- Odour of urine
- Nests

CONTROL

1. ANTICOAGULANT RODENTICIDES MUST BE CONSUMED OVER A PERIOD TO BE EFFECTIVE.
2. THESE POISONS DO NOT CAUSE FEEDING TO STOP.
3. ANTICOAGULANTS PRESENTLY BEING USED ARE EITHER COUMARIN DERIVATIVES OR IDANDIONES.
4. THERE ARE MANY BRANDS AVAILABLE FROM HARDWARE STORES, GARDEN CENTRES, OR RETAIL OUTLETS WHICH SELL PESTICIDES.

NOTES